

EXHIBIT D

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SKYLINE SOFTWARE SYSTEMS, INC.,)

Plaintiff,)

v.)

KEYHOLE, INC. and)

GOOGLE, INC.,)

Defendants.)

CIVIL ACTION NO. 04-11129DPW

**PLAINTIFF'S SUPPLEMENTAL OBJECTIONS AND ANSWERS
TO KEYHOLE'S INTERROGATORIES (Nos. 1, 2, 3, 4, 5, 6 and 10)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, Plaintiff Skyline Software Systems, Inc. ("Skyline") hereby provides its first supplemental objections and answers to Defendant Keyhole, Inc.'s ("Keyhole") First Set of Interrogatories ("Interrogatories") (Nos. 1, 2, 3, 4, 5, 6 and 10).

GENERAL OBJECTIONS

1. Skyline answers the Interrogatories without waiving the right to object on any grounds to the admission into evidence of any information provided in response to the Interrogatories in this or any other proceeding.

2. Skyline objects to all definitions, instructions, and interrogatories to the extent they purport to impose any requirement or obligation on Skyline beyond those set forth in the Federal Rules of Civil Procedure and any applicable local rules or orders of the Court.

3. By providing information responsive to the Interrogatories, Skyline does not waive, and shall not be deemed to have waived, the attorney-client privilege, the protection of the work product doctrine, the immunity from discovery of documents prepared in anticipation of litigation or for trial, or any other privilege or immunity from discovery that may attach to any

information in its possession, custody or control. Inadvertent disclosure of privileged information shall not constitute a waiver of any applicable privilege.

4. Skyline objects to each Interrogatory to the extent that it is overly broad, burdensome, ambiguous, vague, fail to identify the information sought with reasonable particularity, unintelligible, and/or not reasonably calculated to lead to the discovery of admissible evidence. Skyline does not concede that the information requested in the Interrogatories is relevant to a claim or defense of any party in the proceeding. Skyline preserves all objections as to competency, relevancy, materiality and admissibility.

5. Skyline objects to the Interrogatories as exceeding the scope of relevant discovery during this phase of the scheduling by the Court.

6. In addition to the general objections set forth above, Skyline sets forth below specific objections to individual Interrogatories where appropriate, including objections that are not generally applicable to all of the Interrogatories. By setting forth such specific objections, Skyline does not intend to limit the general objections set forth above.

SPECIFIC OBJECTIONS AND ANSWERS

INTERROGATORY NO. 1:

Identify each Asserted Claim and for each such Asserted Claim, identify each Accused Product, where each element of the Asserted Claim is found within that Accused Product, and whether each element of the Asserted Claim is claimed by you to be literally present and/or present under the doctrine of equivalents in that Accused Product.

ANSWER TO INTERROGATORY NO. 1:

Skyline objects to this interrogatory on the ground that it has received no discovery from Defendants and, in particular, no discovery concerning the specifications, processes, operations or design of its products or similar detail concerning their products or services. Based on the information available to date, Skyline responds as follows and reserves the right to supplement

this answer. Skyline also objects to this interrogatory on the ground that it is comprised of at least four and as many as twenty-six (26) separate interrogatories.

Without waiving these objections or the General Objections, Skyline states that, based on the information currently available, the Accused Products of which Skyline currently is aware and the names for these products as published by Keyhole are Keyhole Pro, Keyhole 2 Pro, Keyhole LT, Keyhole 2 LT, Keyhole NV, Keyhole 2 NV, Earthviewer, Keyhole Enterprise Client, Keyhole 2 Enterprise Client, Keyhole EC, Keyhole 2 EC, Keyhole's Enterprise Solutions products, Keyhole 2 Fusion LT and Keyhole 2 Server and services provided by Keyhole in connection with these products. Certain of these products have been apparently renamed by Google and the Google Accused Products of which Skyline is currently aware are Google Earth, Google Earth Plus, Google Earth Pro, and Google Earth Enterprise Solution (including Google Earth Fusion, Google Earth Server and Google Earth Enterprise Client), including the Geo Coder Server and any predecessor or successor products and related software service.

Skyline objects to the Interrogatory insofar as it seeks the identification of all claims and whether the claims are infringed directly or based on the doctrine of equivalents insofar as Defendants have not provided detailed discovery on the operations or details of their products or services. Notwithstanding this objection, Skyline states that Defendants' products infringe at least claims 1, 2, 3, 7, 8, 9, 11, 12, 13, 14, 16, 18, 19, 21, 22, 23 and 24. Skyline further states that the elements of the claims are literally present and, if found not to be literally present, are present under the doctrine of equivalents. In further answer to this Interrogatory, Skyline attaches claim charts hereto as Exhibit A.

INTERROGATORY NO. 2:

For each claim of the Patent-in-Suit that you contend is infringed, state the construction you contend should be given to each word, term or phrase of such claim, and the bases therefor, including without limitation whether you contend such word, term or phrase has a special or uncommon meaning, and if a method claim, whether or not you contend the steps in the method must be performed in the order recited in the claim and why the steps of the method claims must or need not be performed in the order recited. Include in your answer specific identification of each portion or reference from the specification, figures, and each item in the prosecution history, if any, that supports, describes or explains the meaning you give to each such word, term and/or phrase of the claim, including for each means plus function limitation, identification by column, line number and figure reference numeral, each structure in the specification and figures you contend corresponds to and/or performs each claimed function in such limitation, and state by column, line number and figure reference numeral, if any, the specific portions of the specification you contend link such structure(s) with performing each such claimed function.

ANSWER TO INTERROGATORY NO. 2:

Skyline objects to this Interrogatory on the ground that it seeks a definition for each word, term and phrase in the '189 Patent without any regard for whether the words are at issue or deemed ambiguous or subject to alternative meanings by Keyhole. Such a request is overbroad and seeks irrelevant information. Skyline further objects to this Interrogatory to the extent that it violates Federal Rule of Civil Procedure 33(a), as well as the parties' Joint Scheduling Conference Statement dated December 15, 2004, to the extent this Interrogatory exceeds the limitation on the number of interrogatories to twenty-five (25), including all discrete subparts. This Interrogatory, in essence, constitutes dozens of separate interrogatories. As such, this Interrogatory is overly broad and unduly burdensome. Skyline also objects to the extent that the Request calls for an expert opinion, which is governed by the schedule and provisions agreed to by the parties with respect to expert discovery. The parties stipulated that expert reports concerning claims other than Claims 1 and 12 would be exchanged on December 8, 2006. Skyline further objects to this Interrogatory as premature. Pursuant to the Scheduling Order dated August 1, 2006, the parties are to submit opening claim construction briefs on September

29, 2006. The parties are still in the process of identifying which claim terms need be construed by the Court, and Skyline has yet to identify all evidence to support its proposed claim constructions.

Subject to and without waiver of these and the General Objections above, Skyline responds as follows: On June 30, 2006, Defendants identified numerous claim terms and phrases contained in Claims 2, 3, 7, 8, 9, 11, 13, 14, 18, 19, 21 and 22 that they contend require construction by the Court. On July 14, 2006, Skyline provided its proposed construction of the claim terms and phrases identified by Defendants as requiring construction. On September 13, 2006 Defendants provided a revised list of claim terms in dispute based on a conference between the parties. The parties are in the process of refining the issues in dispute concerning the claim terms, consistent with the Court's briefing schedule on the issue.

INTERROGATORY NO. 3:

For each word, term or phrase of a claim of the Patent-in-Suit for which you provided a construction in response to Interrogatory No. 2, identify each person with knowledge of such meaning and construction.

RESPONSE TO INTERROGATORY NO. 3:

Skyline objects to this Interrogatory on the ground that it seeks information shielded from disclosure by the attorney-client privilege, the attorney work product doctrine or other applicable protection. Skyline further objects to this Interrogatory to the extent that it calls for an expert opinion, which is governed by the schedule and provisions agreed to by the parties with respect to expert discovery. The parties stipulated that expert reports concerning claims other than Claims 1 and 12 would be exchanged on December 8, 2006. Skyline further objects to this Interrogatory as premature. Pursuant to the Scheduling Order dated August 1, 2006, the parties are to submit opening claim construction briefs on September 29, 2006. The parties are still in

the process of identifying which claim terms need be construed by the Court, and Skyline has yet to identify all evidence to support its proposed claim constructions.

Subject to and without waiver of these and the General Objections above, Skyline responds as follows: The individual at Skyline with information regarding the meaning and construction of those claim terms and/or phrases identified in response to Interrogatory No. 2 is Ronnie Yaron.

INTERROGATORY NO. 4:

For each word, term or phrase of a claim of the Patent-in-Suit for which you provided a construction in response to Interrogatory No. 2, identify each item of evidence that supports or counters your proposed construction, including but not limited to, expert testimony, inventor statements or testimony, dictionary definitions, and citations to learned treatises, publications, or patents.

RESPONSE TO INTERROGATORY NO. 4:

Skyline objects to this Interrogatory on the ground that it seeks information shielded from disclosure by the attorney-client privilege, the attorney work product doctrine or other applicable protection. Skyline further objects to this Interrogatory to the extent that it calls for an expert opinion, which is governed by the schedule and provisions agreed to by the parties with respect to expert discovery. The parties stipulated that expert reports concerning claims other than Claims 1 and 12 would be exchanged on December 8, 2006. Skyline further objects to this Interrogatory as premature. Pursuant to the Scheduling Order dated August 1, 2006, the parties are to submit opening claim construction briefs on September 29, 2006. The parties are still in the process of identifying which claim terms need be construed by the Court, and Skyline has yet to identify "each item of evidence that supports or counters your [its] construction[.]" Pursuant

to the Court's Scheduling Order dated August 1, 2006, the parties are to exchange claim construction briefing on September 29, 2006. Skyline has already identified each "item of evidence" requested above with respect to Claims 1 and 12 in its legal memoranda filed on March 4, 2005 and April 5, 2005.

INTERROGATORY NO. 5:

For each invention described and claimed in the Patent-in-Suit, describe the circumstances of its conception and reduction to practice, including when and where such conception and reduction to practice occurred, and identify all persons involved in or otherwise having knowledge of such conception and/or reduction to practice.

ANSWER TO INTERROGATORY NO. 5:

Skyline objects to this Interrogatory to the extent that it requires Skyline to draw legal conclusions, interpret legal terms, concepts and/or principles, and/or to interpret statutory law and/or case law in order to provide a response. Skyline further objects to this Interrogatory to the extent that the terms "conception" and "reduction to practice" are vague and ambiguous.

Subject to and without waiver of these and the General Objections above, Skyline responds as follows: In mid-1997, Ronnie Yaron suggested to Ofer Shor the idea of streaming three-dimensional data over a network. From late-1997 through the mid-1998, Mr. Yaron and Mr. Shor discussed ways to accomplish this objective. In early- to mid-1998, Mr. Shor began to write the source code. By mid-1998, Skyline had developed a prototype for this invention. The earliest source code that Skyline has been able to locate (which was produced to Defendants) was entered into Skyline's source control system, SourceSafe, in August 1998. Skyline continued to refine this approach over the course of the next several months, producing a second prototype in early-1999.

The individuals involved in this work in 1997 through 1999 were Ronnie Yaron and Ofer Shor. Alon Barzilay worked at the direction of Mr. Yaron and Mr. Shor in 1998 and 1999. Skyline further answers that documents responsive to this Interrogatory have been produced and, pursuant to FED R. CIV. P. 33(d), the answer to this Interrogatory may be derived or ascertained from SKY001597.1.

INTERROGATORY NO. 6:

For each invention described and claimed in the Patent-in-Suit, describe the circumstances of its first disclosure, first public use, first offer for sale and first sale, including when and where such disclosure, use, offer or sale occurred, and identify all persons involved in or otherwise having knowledge of such disclosure, use, offer or sale.

ANSWER TO INTERROGATORY NO. 6:

Skyline objects to this Interrogatory as overly broad and unduly burdensome to the extent that it requests details concerning the multiple events included in the Interrogatory, all of which occurred nearly ten years ago. Subject to and without waiver of these and the General Objections above, Skyline responds as follows: In March and April 1998, in the context of ongoing confidential business discussions about Skyline's then-existing technology, Skyline had preliminary discussions with Fujitsu Business Systems ("FJB") about a "black box" concept to stream three-dimensional data over a network for professional and consumer services. Over the course of several months, Skyline translated this concept into technology. In May 1998, Skyline sought funding for its concept from the Office of the Chief Scientist. In August 1998, Skyline took its then-existing source code for the technology that later became known as "TerraGate" and input it into the SourceSafe system in August 1998. In March 1999, FJB conducted beta testing of the TerraGate prototype.

The individuals involved in the disclosure, use, offer or sale of the invention were Ronnie Yaron and Arik Yifat. Skyline further answers that documents responsive to this Interrogatory have been produced and, pursuant to FED R. CIV. P. 33(d), the answer to this Interrogatory may be derived or ascertained from SKY1435-1597 and SKY009133-SKY009147.

INTERROGATORY NO. 10:

Identify all Prior Art known to you concerning the Patent-in-Suit, including when and the circumstances under which you first learned of such Prior Art.

ANSWER TO INTERROGATORY NO. 10:

Skyline objects to this Interrogatory to the extent that its definition of the term Prior Art and its use of the phrase "concerning the Patent-in-Suit" are vague and ambiguous. Throughout this litigation, Defendants have identified various documents as "Prior Art" that pre-date the filing date of the '189 Patent which have no relation to the invention claimed in the '189 Patent. Skyline objects to this Interrogatory as overly broad and unduly burdensome. Skyline further objects to this Interrogatory to the extent that it contains no time limitation, and conceivably seeks information spanning the course of a decade. Skyline further objects to the Interrogatory as overly broad to the extent that it seeks information concerning "Prior Art" that Skyline became aware of following issuance of the '189 Patent.

Subject to and without waiver of these and the General Objections above, Skyline responds as follows: Skyline became aware of certain prior art during the patent application process that resulted in issuance of the '189 Patent. These documents are disclosed on the face of the '189 Patent, namely: U.S. Patent Nos. 4,070,705, 4,359,733, 4,940,972, 5,550,959, 5,566,073, 5,652,863, 5,760,783, 5,798,713, 5,886,702 and 6,111,568.


Certification

I, Aharon Yaron, state under the pains and penalties of law that I am the President of Skyline Software Systems, Inc. ("Skyline"). I have read the foregoing Plaintiff's Supplemental and Objections And Answers to Keyhole, Inc.'s First Set of Interrogatories (Nos. 1, 2, 3, 4, 5, 6 and 10) and know their contents. The answers I have provided, subject to any inadvertent or undiscovered errors, are based on and necessarily limited to the records and information available and discovered in preparation for these answers. Skyline reserves the right to make changes to these answers if it appears at any time that omissions or errors have been made in preparing the answers, or if I become aware of more accurate information. Subject to these limitations, these answers are true to the best of my knowledge, information and belief.

Signed under the pains and penalties of perjury this ____ day of September, 2006.

Aharon Yaron

AS TO OBJECTIONS:



H. Joseph Hameline, BBO # 218710
Geri L. Haight, BBO # 638185
Mintz, Levin, Cohn, Ferris
Glovsky and Popeo, P.C.
One Financial Center
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(617) 542-6000

Dated: September 22, 2006

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Yaron Yaron

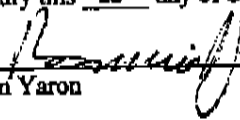
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Certification

I, Aharon Yaron, state under the pains and penalties of law that I am the President of Skyline Software Systems, Inc. ("Skyline"). I have read the foregoing Plaintiff's Supplemental and Objections And Answers to Keyhole, Inc.'s First Set of Interrogatories (Nos. 1, 2, 3, 4, 5, 6 and 10) and know their contents. The answers I have provided, subject to any inadvertent or undiscovered errors, are based on and necessarily limited to the records and information available and discovered in preparation for these answers. Skyline reserves the right to make changes to these answers if it appears at any time that omissions or errors have been made in preparing the answers, or if I become aware of more accurate information. Subject to these limitations, these answers are true to the best of my knowledge, information and belief.

Signed under the pains and penalties of perjury this 22 day of September, 2006.



Aharon Yaron

AS TO OBJECTIONS:

H. Joseph Hameline, BBO # 218710
Geri L. Haight, BBO # 638185
Mintz, Levin, Cohn, Ferris
Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111
(617) 542-6000

Dated: September __, 2006

EXHIBIT A

US Pat. 6,496,189

EXHIBIT A¹

	Claim Element	Accused Elements (generally "Google Earth") ²
1(a)	A method of providing data blocks describing three-dimensional terrain to a renderer, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the method comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
1(b)	receiving from the renderer one or more coordinates in the terrain along with indication of a respective resolution level;	The user selects or indicates a viewpoint or succession of viewpoints using the Google Earth user interface. For each viewpoint, coordinates in the terrain and indications of a respective resolution level are computed.
1(c)	providing the renderer with a first data block which includes data corresponding to the one or more coordinates, from a local memory;	The client computer includes both a renderer and a local memory. Data blocks, or blocks of digital information are stored in the client's local memory, and are provided to the renderer, as requested, so that the appropriate images may be rendered by the client. In this process, when a data block is provided to the renderer from local memory, it is then the first data block in the ensuing process.

¹ Plaintiff also incorporates by reference the Expert Report of Dinesh Manocha, Ph.D.

² The "Accused Element(s)" refer generally to "Google Earth" and include all products and/or services related to and/or incorporating the following Keyhole and/or Google products and/or services related to landscape display, and any product and/or service employing the client or server software and/or technology related to landscape display or acquisition, display and/or rendering of 3D terrain data of the following products and services: Earthviewer, Keyhole LT, Keyhole NV, Keyhole Pro; Keyhole2 LT; Keyhole 2 NV; Keyhole2 Pro; Keyhole Enterprise Solutions, products including Keyhole's EarthStream technology, Keyhole 2 EC, Keyhole 2 FUSION LT, Keyhole 2 FUSION PRO, and Server, as well as Google Earth, Google Earth Plus, Google Earth Pro, and Google Earth Enterprise Solution (including Google Earth Fusion, Google Earth Server, and Google Earth Enterprise Client "EC"), the GeoCoder Server and any predecessor or successor products and related software service.

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OUTSIDE COUNSEL'S EYES ONLY
PURSUANT TO STIPULATED PROTECTIVE ORDER**

US Pat. 6,496,189

	Claim Element	Accused Elements (generally "Google Earth") ²
1(d)	downloading from a remote server one or more additional data blocks at a resolution level higher than the resolution level of the first block which include data corresponding to the one or more coordinates if the provided block from the local memory is not at the indicated resolution level.	If data blocks required to render the desired view are not in local memory, the client requests the required additional higher resolution data blocks to do so from the remote server. The corresponding data blocks are then provided to the client, typically over the Internet by way of a communication link. The Google Earth products indicate that data is being downloaded by the "Streaming" bar on the screen. The relevant coordinates (latitude and longitude) and resolution level ("Eye elevation") for the data blocks are also displayed. The accused products display a lower resolution view prior to receiving higher resolution data blocks.
2(a)	A method according to claim 1, wherein downloading the one or more additional data blocks comprises downloading the blocks from a succession of resolution levels, from the level immediately higher than the resolution level of the first block up to the maximal existent resolution level on the server not above the indicated resolution level.	As the user requests higher resolution terrain images, the data blocks are downloaded by the accused products according to a priority system until the requested resolution is provided or until the maximal resolution level of the available data is provided. The data belongs to a hierarchical structure with lower levels of detail in the data corresponding to the higher levels in the Quad Node Tree. As the system traverses down through the Quad Node Tree, nodes are accessed which correspond to data containing successively higher levels of detail. During the process of node access, data not present in local memory is requested. Successively more detail per unit area appears at the indicated coordinate location on the terrain as the higher resolution data blocks are received and rendered by the client.

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	Claim Element	Accused Elements (generally "Google Earth") ²
3(a)	A method of providing data blocks describing three-dimensional terrain to a renderer, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the method comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
3(b)	receiving from the renderer a plurality of coordinates in the terrain along with indication of a respective resolution level; said plurality of coordinates being included in a plurality of respective distinct blocks;	The renderer determines and provides the indicated coordinates (such as two or more coordinates representing latitude and longitude) and indication of a resolution level. The coordinates are provided in order to obtain the required data blocks and render a better view of the corresponding 3D terrain. The local computer requests a number of data blocks based on the plurality of coordinates and indication of a resolution level. The coordinates received from the renderer correspond to more than one (distinct) data block.
3(c)	providing the renderer with first data block which includes data corresponding to at least some of the plurality of coordinates from a local memory;	The renderer receives a (first) data block that includes digital data corresponding to at least some of the coordinates in the terrain from a local memory on the client.

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	Claim Element	Accused Elements (generally "Google Earth") ²
7(a)	A method of providing data blocks describing three-dimensional terrain to a renderer, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the method comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
7(b)	receiving from the renderer one or more coordinates in the terrain along with indication of a respective resolution level;	The user selects or indicates viewpoint or succession of viewpoints using the Google Earth user interface for example. For each viewpoint, coordinates in the terrain and indications of a respective resolution level are computed.
7(c)	providing the renderer with a first data block which includes data corresponding to the one or more coordinates, from a local memory;	The client computer includes a renderer and a local memory. Data blocks, or blocks of digital information, are stored in the client's local memory, and are provided to the renderer so that the appropriate images may be rendered by the client. This process includes a first data block being provided to the renderer from local memory.

US Pat. 6,496,189

	Claim Element	Accused Elements (generally "Google Earth") ²
7(d)	downloading from a remoter server one or more additional data blocks which include data corresponding to the one or more coordinates if the provided block from the local memory is not at the indicated resolution level; and	The client receives additional data blocks corresponding to the requested terrain coordinates and resolution level. In some instances the additional data blocks are provided to the client to refine the rendered image of the indicated coordinate location of the terrain. Also, the additional data blocks are provided to the client responsive to the user indicating a movement of the viewpoint or desired location in the terrain, such as when rotating or traveling over the terrain. If the data blocks required to render the desired view are not in local memory, the required additional data blocks to do so are transferred from the remote server, typically over the Internet by way of a communication link. The Google Earth products indicate that data is being downloaded, for example, by the "Streaming" bar on the screen. The relevant coordinates (latitude and longitude) and resolution level ("Eye elevation") are also displayed. The accused products initially display a lower resolution view and subsequently display higher resolution data blocks, which require more time to be downloaded.
7(e)	downloading from a remote server excess blocks not currently needed by the renderer to fill up the local memory when not downloading blocks required by the renderer.	The accused products can further download data blocks, in excess of those needed to perform the rendering for the currently requested view, to fill the amount of local memory in the client computer.
8	A method according to claim 7, wherein downloading the data blocks comprised downloading the blocks via the Internet.	The accused products download data blocks over the Internet.
9	A method according to claim 7, wherein the renderer renders a view from a current viewpoint, and wherein downloading the excess blocks comprises filling the local memory with substantially all of the blocks surrounding a point in the terrain seen from the current viewpoint within a predetermined distance range.	The accused products continue to download data blocks, to fill the amount of local memory allocated to this storage, for terrain surrounding the current view point.

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	Claim Element	Accused Elements (generally "Google Earth") ²
11	A method according to claim 9, wherein filling the local memory comprises filling the memory with substantially all the blocks within the range from a lower resolution level before downloading blocks of higher resolution levels.	The accused products generally follow a routine, based in the hierarchical structure of the database, of downloading lower resolution level data blocks then higher resolution data blocks, and download data blocks describing the terrain within a range from the indicated coordinates.
12(a)	Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
12(b)	a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the render;	The accused products include a client computer and local memory which stores requested data blocks proximal to the coordinates for that viewpoint.
12(c)	a communication link, through which the memory receives the data blocks from a remote server;	The data blocks are downloaded over a communication link, such as connection to the Internet, used to transfer data between computers (e.g., the client and the server)

US Pat. 6,496,189

	Claim Element	Accused Elements (generally "Google Earth") ²
12(d)	a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with a first data block which includes data corresponding to the one or more specified coordinates from a local memory, and downloads over the communication link one or more data blocks of a resolution level higher than the resolution level of the first block which include data corresponding to the one or more coordinates if the first block is not from the indicated level.	The client and server computers include processors. The apparatus includes a processor that is configured by software to receive from the renderer an indication of a respective resolution level and coordinates in the terrain. A processor also provides to the renderer a first data block that includes data corresponding to the coordinates using the local memory, and a processor downloads over the communication link additional higher resolution data blocks when the first data block is not at the indicated resolution level.
13(a)	Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>

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PURSUANT TO STIPULATED PROTECTIVE ORDER

US Pat. 6,496,189

	Claim Element	Accused Elements (generally "Google Earth") ²
13(b)	a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the renderer;	The accused products include a client computer and local memory which stores requested data blocks proximal to the coordinates for that viewpoint.
13(c)	a communication link, through which the memory receives the data blocks from a remote server;	The data blocks are downloaded over a communication link, such as connection to the Internet, used to transfer data between computers (e.g., the client and the server)
13(d)	a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with a first data block which includes data corresponding to the one or more specified coordinates from a local memory, and downloads over the communication link blocks from the resolution level of the first block up to a maximal resolution level of blocks stored on the server that is not above the indicated resolution level which include data corresponding to the one or more coordinates if the first block is not from the indicated level.	The computers include processors. The processor is configured with software to receive an indication of a respective resolution and coordinates, and provides to the renderer a first data block that includes data corresponding to the coordinates using the local memory, and downloads over the communication link additional higher resolution data blocks when the first data block is not at the indicated resolution level.
14(a)	Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware</p>

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		<p>to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
14(b)	a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the renderer;	The accused products operate as and on computers having local memory. The accused products' local memory stores data blocks of terrain which is proximal to the current viewpoint.
14(c)	a communication link, through which the memory receives the data blocks from a remote server;	The data blocks are downloaded over a communication link, such as connection to the Internet, used to transfer data between computers (e.g., the client and the server)
14(d)	a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with a first data block which includes data corresponding to the one or more specified coordinates from a local memory, and downloads over the communication link blocks of lower resolution levels before blocks of higher resolution levels which include data corresponding to the one or coordinates if the first block is not from the indicated level.	The accused system includes processors. A client processor is configured with software to receive from the renderer an indication of a respective resolution and coordinates. A processor also provides to the renderer a first data block that includes data corresponding to the coordinates using the local memory, and a processor downloads over the communication link additional higher resolution data blocks when the first data block is not at the indicated resolution level.
16(a)	Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks	The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to

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	belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:	<p>the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
16(b)	a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the renderer;	The accused products operate as and on computers having local memory. The accused products' local memory stores data blocks of terrain which is proximal to the current viewpoint.
16(c)	a communication link, through which the memory receives the data blocks from a remote server;	The data blocks are downloaded over a communication link, such as connection to the Internet, used to transfer data between computers (e.g., the client and the server)
16(d)	a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with a first data block which includes data corresponding to the one or more specified coordinates from a local memory, and downloads over the communication link one or more additional blocks according to the order in which the coordinates were provided which include	The client and server computers include processors. A client processor is configured to receive from the renderer an indication of a respective resolution and coordinates, and provides to the renderer a first data block that includes data corresponding to the coordinates using the local memory, and a processor downloads over the communication link additional higher resolution data blocks when the first data block is not at the indicated resolution level. The downloading of the additional data blocks is done based in large part on the order in which the coordinates are provided and includes data corresponding to the coordinates if the first data block is not from the indicated resolution level.

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	Claim Element	Accused Elements (generally "Google Earth") ²
	data corresponding to the one or more coordinates if the first block is not from the indicated level.	
18(a)	Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:	<p>The accused products operate in a client server network which downloads requested three-dimensional terrain information (as well as optional data objects such as street information and political boundaries) over the Internet from a remote server(s) to the client or local computer. The user can select a view or views of the terrain represented at various resolutions, or detail per unit area, the data for which is downloaded to the client if not already present there, thus enabling the user to zoom in or out of the terrain.</p> <p>The client employs graphics rendering software and/or hardware to render the 3D terrain based on data blocks of digital information received from the remote server(s).</p> <p>The data blocks belong to and are organized into a hierarchical structure such as a Quad Node Tree structure. Consequently, data blocks in the accused products belong to a hierarchical structure, here a Quad Node Tree. As admitted by Defendants, the Quad Node Tree organizes the data blocks such that the levels (e.g., parent, child, grandchild) contain data blocks of successively higher resolution data having successively greater detail per unit area.</p>
18(b)	a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the renderer;	The accused products operate as and on computers having local memory. The accused products' local memory stores data blocks of terrain which is proximal to the current viewpoint.
18(c)	a communication link, through which the memory receives the data blocks from a remote server;	The data blocks are downloaded over a communication link, such as connection to the Internet, used to transfer data between computers (e.g., the client and the server)

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	Claim Element	Accused Elements (generally "Google Earth") ²
18(d)	a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with a first data block which includes data corresponding to the one or more specified coordinates from a local memory, downloads over the communication link blocks which include data corresponding to the one or more coordinates if the first block is not from the indicated level; and downloads excess blocks not currently needed by the renderer to fill up the local memory when the processor is not downloading blocks required by the renderer.	<p>The client and server computers include processors. A client processor is configured to receive from the renderer an indication of a respective resolution and coordinates. It provides to the renderer a first data block that includes data corresponding to the coordinates using the local memory, and a processor downloads over the communication link additional higher resolution data blocks when the first data block is not at the indicated resolution level.</p> <p>The accused products continue to download data blocks, to fill the amount of local memory allocated to this storage, for terrain surrounding the current view point.</p>
19	Apparatus according to claim 18, wherein the renderer renders a view from a current viewpoint and the processor fills the local memory with substantially all the blocks surrounding a point in the terrain seen from the current viewpoint in a predetermined range.	The accused products generally follow a routine, based in the hierarchical structure of the database, of downloading lower resolution level data blocks then higher resolution data blocks, and download data blocks describing the terrain within a range from the indicated coordinates.
21.	Apparatus according to claim 19, wherein the processor fills the local memory with substantially all the blocks from a lower level before downloading blocks of higher resolution levels.	The accused products can further download data blocks in excess of those needed to perform the rendering above, and to fill the amount of local memory in the client computer, and download the lower resolution data blocks then the higher resolution data blocks.

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22.	Apparatus according to claim 18, wherein the communication link comprises a connection to the Internet.	The communication link employed by the accused products is typically the Internet.
23.	The method of claim 7, wherein the coordinates relate to the coordinates of a predetermined course of a flight vehicle	Google Earth has motion models which simulate flight and relate path coordinates to a flight path of a vehicle such as a helicopter or airplane, such as GeForceMotion or GForce mode, over a predetermined course.
24.	The apparatus of claim 18, wherein said data blocks relate to a course of a flight vehicle.	Google Earth has motion models which simulate flight and relate the path coordinates to a flight path of a vehicle such as a helicopter or airplane, such as GeForceMotion or GForce mode.

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